



U.S. Department
of Transportation

**Federal Aviation
Administration**

Great Lakes Region
Illinois, Indiana, Michigan,
Minnesota, North Dakota,
Ohio, South Dakota,
Wisconsin

2300 E Devon Avenue
Des Plaines, Illinois 60018

POLICY AND PROCEDURES MEMORANDUM - AIRPORTS DIVISION

NUMBER : 5050.5C

DATE : DEC 31 1992

SUBJECT : Planning; Airport Layout Plan Approval and Airport
Master Plan Acceptance

CANCELLATION : This PPM cancels PPM 5050.5B dated March 3, 1987

REFERENCES : 1. FAR Part 77, Objects Affecting Navigable
Airspace
2. FAR Part 157, Notice of Construction,
Alteration, Activation and Deactivation of
Airports
3. Draft Order 1000.4A, Great Lakes Region
Planning and Coordination Procedures and
Memorandum of Understanding dated 5/7/92
4. Order 5050.4A, Airport Environmental Handbook
5. AC 150/5070-6, Airport Master Plans
6. AC 150/5300-13, Airport Design, 9/29/89, as
amended
7. Order 5100.38A, Airport Improvement Program
(AIP) Handbook
8. Order 5280.5A, Airport Certification
Program Handbook

APPENDICES : 1 - Great Lakes Regional Standard Letter
Approval of ALP
2 - Inventory of Changes, PPM 5050.5B to
5050.5C
3 - Airport Programs, Airport Layout
Plans/Airport Master Plans, Draft Order
1000.4A
4 - Flow Chart, Airport Layout and Master Plan
Flow Chart, Draft Order 1000.4A
5 - Resolution of Comments (Internal Use Only)

Distribution: AGL-600/601/602/603/605/610/620
ADO-CHI/ADO-DET/ADO-MSP/ADO-BIS
State Aviation Directors
(for information through ADO's)

Originator: AGL-610



U.S. Department
of Transportation

**Federal Aviation
Administration**

Great Lakes Region
Illinois, Indiana, Michigan,
Minnesota, North Dakota,
Ohio, South Dakota,
Wisconsin

2300 E Devon Avenue
Des Plaines, Illinois 60018

POLICY AND PROCEDURES MEMORANDUM - AIRPORTS DIVISION

NUMBER: Change 1, PPM 5050.5C

DATE: APR 19 1993

SUBJECT: Planning; Airport Layout Plan Approval and Airport
Master Plan Acceptance.

REFERENCE:

1. A/C 150/5300-13, Appendix 7
2. A/C 150/5070-6, Chapter 9
3. FAA Order 5190.6A, Appendix 7
4. FAA Order 5100.38A
5. Minneapolis ADO ALP Checklist
6. States of Michigan and Wisconsin ALP Checklists
7. FAA Northwest Mountain ALP Checklist

ACTION:

1. Add Appendix 6, Airport Layout Plan Checklist
2. Add Appendix 7, Resolution of Comments on
Change 1, PPM 5050.5C (Internal Use Only)

1. Background. Appendix 6 is intended to assist FAA, Sponsors, and consultants in the Preparation and review of Airport Layout Plans.

2. Policy/Procedures. Appendix 6 is a Checklist identifying what should be included on an Airport Layout Plan (ALP). It represents the Great Lakes Regional Standard and should be followed in the preparation of ALP's.


W. Robert Billingsley
Manager, Airports Division

Distribution: AGL-600/601/602/603/605/610/620
ADO-CHI/ADO-DET/ADO-MSP/ADO-BIS
State Aviation Directors
(for information through ADO's)

Originator: AGL-610

DEC 31 1992

1. Background. Airport Layout Plans (ALP's) submitted to the FAA for approval are either new, revised (minor updating of future plans) or as-built plans. An ALP depicting changes in existing (as-built) conditions shall be treated in the same manner as any other revision. Upon approval, it becomes THE current ALP. Approval (or conditional approval) of a new ALP, or of a revision made by changing a previously approved ALP, automatically cancels and supersedes prior approvals. The ALP shall show proposed construction of new runways, runway extensions, terminal buildings, or other major and supportive development. The planned development is reviewed with respect to safety, efficiency, and utility. Proposed design standard modifications shall also be listed on the ALP drawing by the sponsor to facilitate review by all FAA elements.

a. Approval of the ALP does not represent a commitment of Federal funds to any future development. The ALP shall be approved either conditionally or unconditionally. Unconditional approval shall be given when all items of proposed development shown on the ALP and considered not to require further environmental decision making pursuant to Order 5050.4A or have been the subject of an environmental finding; otherwise, conditional approval shall be given. Unconditional approval is also appropriate if only categorically excluded development items are shown on the ALP (Order 5050.4A).

b. Approval of an ALP (including revisions to show "as-built" conditions) is a blanket airspace determination of no hazard to air navigation covering all existing obstructions, including all proposed development included in the ALP. Failure to affect internal coordination in accordance with Order 7400.2C, Handling of Airspace Matters, could have an adverse effect on the navigable airspace. If there are no changes from the proposed development shown on the previously approved ALP, there is no need for further airspace review. Items in full conformity with an approved ALP need no further inter-divisional coordination (other than for construction safety purposes, i.e. a notice of proposed construction (FAA Form 7460-1) is required for this purpose).

2. Policy/Procedures. If the sponsor has an approved ALP, the only standard requiring compliance is the ALP, irrespective of its consistency with any other document.

a. We can strongly encourage a sponsor to revise the ALP to meet current design standards but can not stop a sponsor from building a project that is in accordance with the approved ALP. FAA should strive to obtain a completed project that meets current design standards.

DEC 31 1992

PPM 5050.5C

b. If a sponsor needs to add a runway extension to his ALP, he must use the airport design standards currently in effect or obtain a waiver to planning standards. He should, in order to achieve a uniform appearance and standardization, strive to have the entire runway meet the current airport design standards.

c. If the proposed runway extension constitutes a significant expansion, the sponsor should be asked to have the entire runway meet the current airport design standards. A significant expansion is defined as a project which is clearly designed to provide for a different critical aircraft or to provide for increased payload or range for the existing critical aircraft using that pavement. Normally a runway extension in excess of 1000 feet would be considered significant.

d. If a runway extension is being added to an ALP or revised using the current design standards (e.g. in preparation for a project) and the ALP shows another runway extension that was approved based on superseded design standards, this latter extension would not have to be revised to meet the current design standards unless a safe, acceptable, operational environment cannot be maintained, the safe and efficient use of airspace is adversely affected, or the proposal impacts FAA facilities or equipment. It is not required that only one set of design standards be shown on an ALP.

e. A sponsor undertaking a Master Planning Study or an ALP update should use the airport design standards in effect at that time. It is strongly recommended but not mandatory that "updates" incorporate current national standards. If a prior approved ALP has adopted a different standard - that standard may be carried forward at the Sponsor's option (unless, as in d. above, a safe, acceptable, operational environment cannot be maintained, the safe and efficient use of airspace is adversely affected, or the proposal impacts FAA facilities or equipment.).

f. From a FAR Part 139 standpoint, advisory circulars (ACs) in the 150 series contain standards and procedures that are acceptable to the Administrator. One way of meeting FAR Part 139 requirements is to meet the AC requirement. However, it may be possible to comply with FAR Part 139 without meeting the current airport design standard. The following paragraph help explain the intent of FAR Part 139 design requirements:

(1) With respect to the Section 130.309(a)(2) requirement for safety areas, a runway or taxiway extension of 500 feet or more should normally be considered "significant expansion" for purposes of determining whether it is necessary to provide "a safety area which conforms to the dimensions acceptable to the Administrator at the time construction, reconstruction, or expansion began". (Reference: Policy #5, Page 10, Order 5280.5A)

DEC 31 1992

(2) The term "to the extent practical", pertains to the establishment of safety areas and states that "we should strive to obtain the safety area dimensions according to current design critical whenever the establishment of a safety area is triggered by Section 139.309(a)(2)". (Reference: Policy #4, Page 9, Order 5280.5A)

g. The approval of the ALP shall be documented in the ALP approval letter, a copy of which shall be permanently attached to the face of the ALP. If an approval stamp is used, its language shall cross-reference the letter.

(1) The design modifications that have been approved shall be identified in the approval letter.

(2) When all the required environmental actions have been completed, unconditional approval shall be clearly indicated in the text. (See sample, letter, Appendix 1.)

(3) When the required environmental actions have not been completed, the following condition shall be included in the approval letter, as a minimum. Refer to Appendix 1, Paragraph 5 if a more detailed explanation of environmental requirements is needed.

"The following items must have a specific environmental approval prior to accomplishment:

- a. (List items requiring environmental approval)
- b.
- c.
- d.

Any of the mentioned development shall not take place until the environmental processing has been approved by the FAA. All development items must comply with the National Environmental Policy Act of 1969 (P.L. 91-190)."

(4) Those specific items shown on the ALP which are covered by Order 5050.4A and have not yet been environmentally approved by FAA shall be listed. The list of development items shall be updated if appropriate each time an ALP revision is approved.

DEC 21 1992

PPM 5050.5C

(5) The provisions of draft Order 1000.4A that are included as Appendices 3 and 4 should be implemented. The provisions have been coordinated with and received the general concurrence of AGL-200/-400/-500/-700 via Memorandum of Understanding dated 5/7/92.


W. Robert Billingsley
Manager, Airports Division

DEC 31 1992

PPM 5050.5C
Appendix 1

Appendix 1. Great Lakes Regional Standard ALP Approval Letter

[The author is to select those paragraphs that apply to the specific approval situation. The paragraph arrangement paragraph numbering format are at the discretion of the ADO]

(Date)

(Airport Sponsor)

[Letter for an Airport Layout Plan only]

Dear (Name)

RE: (Airport Name), (Associated City), (State)
Airport Layout Plan Approval.

Enclosed are two (approved) (conditionally approved) copies of the (Airport Name) Airport Layout Plan (ALP), dated (date), that was submitted with your letter dated (date). This letter cancels or supersedes all prior ALP approvals. The ALP (approval) (conditional approval) is based upon recognition of and adherence to the following:

[Letter involving a Master Plan with an Airport Layout Plan]

Dear (Name):

Re: (Airport Name), (Associated City), (State)
Airport Master Plan (AIP Grant Number)
Airport Layout Plan Approval

The Master Plan (MP) documents for the (Name) Airport are acceptable from a contractual standpoint with respect to the terms and conditions for the grant agreement. The contents of the MP reflect the views of the (Name or Sponsor), who is responsible for the accuracy of the document. The MP does not necessarily reflect the views or policies of the Federal Aviation Administration (FAA), and the determination of acceptability does not imply the FAA agrees with the MP conclusions and recommendations.

Enclosed are two (approved) (conditionally approved) copies of the (Airport Name) Airport Layout Plan (ALP), dated (date), that was submitted with your letter dated (date). This letter cancels or supersedes all prior ALP approvals. The ALP (approval) (conditional approval) is based upon recognition of and adherence to the following:

DEC 31 1992

[The following are standard sub-paragraphs that should be in all approval letters]

1. The approval is not to be considered a commitment of Federal funding for the proposed development. The FAA has concurred with the proposed development for planning purposes only based on current safety, utility, and efficiency standards. Actual development should comply with approved standards applicable at the time of construction. Design standard modifications have been granted as follows:

- a. (List design standard modifications & date approved)
- b.
- c.
- d.

If any of the design critical aircraft or aircraft groups change, this ALP must be reevaluated by FAA.

2. Our approval does not infer or imply that the land in the airport vicinity is considered compatible with airport operations. Federal requirements stipulate:

- a. All development programs should be reasonably consistent with the plans of local and state planning agencies for the development in the airport vicinity.
- b. That fair consideration has been given to the interest of communities in or near the airport.
- c. That development programs provide for the protection and enhancement of the environment.

3. The FAA offers no objection to the proposed ultimate airspace utilization as depicted on the ALP based on considerations of safe and efficient use of airspace. The ALP has the status of "Plan on File" for the purpose of 14 CFR 77, Obstruction Evaluations, and 14 CFR 152, Airport Aid Program. A review of the airside landing area development was conducted according to the following 14 CFR's: -77, -152, and -157, Notice of Construction, Alteration, Activation, and Deactivation of Airports (reference Aeronautical Study Number _____). It should be noted that FAA cannot prevent erection of any structure near an airport. Airport environs can only be protected through state and local zoning ordinances, building regulations, and like requirements.

DEC 31 1992

PPM 5050.5C
Appendix 1

4. The following items must have a specific environmental approval prior to accomplishment:

- a. (List items requiring environmental approval)
- b.
- c.
- d.

Any of the mentioned development shall not take place until the environmental processing has been approved by the FAA. All development items must comply with the National Environmental Policy Act of 1969 (P.L. 91-190).

[For approval situations that may require a detailed explanation of environmental requirements use the following sub-paragraph in lieu of sub-paragraph 4 above]

5. Approval is given subject to the condition that the proposed airport development identified by item herein as requiring environmental processing shall not be undertaken without prior written environmental approval by the FAA. The development requiring review for consistency with FAA policies and procedures for considering environmental impacts are itemized as follows:

- a. New Runway ().
- b. Runway extension to Runway ().
- c. Runway strengthening which would result in a 1.5 Ldn or greater increase in noise over any noise sensitive area located within the 65 Ldn contour.
- d. Construction or relocation of entrance or service road connections to public roads which adversely affect the capacity of such public roads.
- e. Land acquisition associated with any of the above items plus land acquisition which results in relocation of residential units when there is evidence of insufficient comparable replacement dwellings, major disruption of business activities, or acquisition which involves land covered under Section 4(f) of the DOT Act (rectified 49 USC Subtitle I, Section 303, January 12, 1983).

DEC 3 1 1992

f. An airport development action that falls within the scope of Paragraph 24 of FAA Order 5050.4A, or which involves any of the following:

- (1) Use of Section 4(f) land.
- (2) Effect on property included in or eligible for inclusion in the National Register of Historic Places or other property of state or local historical, architectural, archeological, or cultural significance.
- (3) Land acquisition for conversion of farmland, scoring over 160 on form AD-1006, protected under the Farmland Protection Policy Act (FPPA) to nonagricultural use through federal financial assistance or through conveyance of government land.
- (4) Wetlands, coastal zones, or floodplains.
- (5) Endangered or threatened species.

[The following paragraphs should be included in all approval letters]

To avoid conflicts with future development, we recommend you utilize the ALP when preparing leases. We further recommend you provide copies to the local and state planning zoning boards and county and city officials and encourage them to adopt compatible land use criteria in and around the airport. Copies should also be distributed to Fixed Base Operators (FBO's) and airport users.

49 USC 47107(a)(16)(D)

The Airport and Airway Improvement Act (~~Section 511(a)(15)~~) requires the sponsor to eliminate any adverse effects on Federal facilities, or bear all costs to relocate those facilities, that are a result of an airport change. However, if AIP eligible construction/ development items adversely affect FAA facilities, then the cost of relocating the facilities may be eligible under AIP.

This approval does not include a detailed evaluation of actual construction. Prior to constructing any development on the airport, notice (FAA Form 7460-1) consistent with 14 CFR 77 must be filed with this office. This approval does not include approval for temporary construction equipment which may be used during actual construction, e.g., cranes, equipment staging areas, site access routes, etc. A separate construction safety/phasing plan for any project (unless specifically approved by attachment to this letter) should be reviewed by the FAA no less than 60 days prior to beginning any project.

DEC 31 1992

PPM 5050.5C
Appendix 1

If development is planned without aviation trust fund investments that will change the status or geometrics of runways, taxiways, aprons, or other operating airport surfaces, notice (FAA Form 7480-1) must be filed with this office consistent with 14 CFR 157.

We trust this letter provides a clear explanation of the conditions and terms of our approval. If you desire further clarification, please contact this office at (xxx) xxx-xxxx.

Sincerely,

(Name)
(Title)

enclosure: ALP (2 copies)

cc: AGL-530 w/ALP
AGL-220 w/ALP
AGL-420 w/ALP (2 copies) & Master plan
AGL-700
State Aeronautics Bureau w/ALP & MP
ATCT (Location)
Airway Facilities Hub Sector (Location)
Flight Standards District Office (Location)
Civil Aviation Security Field Office (Location)

Appendix 2. Inventory of Changes, PPM 5050.5B to PPM 5050.5C

1. Many references have been eliminated and GL Draft Order 1000.4A has been added. GL Draft Order 1000.4A provides the latest guidance on planning and coordination procedures.
2. Background. Added emphasis that design modifications are to be listed in the ALP approval letter to facilitate agency review. Editorial text changes have been made for clarity.
3. Policy/Procedures. The detailed critical aircraft dimensional criteria has been deleted since it is covered in referenced AC 150/5300-13. A revised paragraph on required environmental actions is consistent with the revised ALP approval letter. Provisions of GL Draft Order 1000.4A has been added since it provides the latest Great Lakes guidance on planning and coordination. Paragraph has been added clarifying the ALP "is" the standard for the airport. When the ALP is updated, current FAA standards should be followed. An explanation has also been added regarding FAR Part 139 Safety Requirements and methods of complying with same.
4. Appendix 1. The ALP approval letter has been completely rewritten to make it more understandable. The revised letter is written so the author can "pick and choose" which paragraphs are applicable to the specific approval situation. Master Plan documents are referenced in the letter and emphasis is added to the statement that the FAA is approving the ALP and/or Master Plan from a contractual, planning, and airspace utilization standpoint. The approval is not to be considered a commitment of aviation trust fund investments. The sponsor is responsible for the accuracy of the data in the Master Plan. Paragraph states that individual notice to FAA must be given for specific construction/development so a detailed agency review can be made on its affect on the airspace utilization and airport operations. Compatible land use in and around the airport is a sponsor/local action and the FAA cannot prevent the erection of structures near the airport.

DEC 31 1992

GL 1000.4A

12. Airport Layout Plans/Airport Master Plans.

a. Airports Programs Coordination VIA ALP/AMP. The reference to Airport Master Plan is designated to mean the Airport Layout Plan portion of the Master Plan documentation. The following paragraphs define responsibilities and outlines procedures to be followed in reviewing and accepting/approving Airport Master Plans and Airport Layout Plans. The ALP/AMP will be the primary vehicle for Airport Division programs coordination purposes. Items in full conformance to the approved ALP will not normally be re-coordinated (except F&E NAVAID projects) during the subsequent project development phases unless requested in the initial coordination. Therefore, it is important that Program divisions provide all possible input at this stage and that review comments be restricted to significant effects on safety, airspace utilization, and FAA facilities and equipment.

(1) EMI/LOS Review. Decisions such as line-of-sight (LOS) evaluations, reflection analysis, and Electro-magnetic Interference (EMI) determinations cannot totally be made from two-dimensional drawings. Items which affect these considerations can only be reviewed conceptually at the ALP/AMP stage (if the ALP/AMP submittal is limited to two dimensional drawings). A site plan, structure elevations, exterior construction materials, geodetic coordinates or three-dimensional submittals are necessary for a complete EMI/LOS review. If sufficient information is provided on the ALP, a complete evaluation will be made and when otherwise, AGL-420 will comment on the information needed to complete the review.

(2) NavAids. In the case of NAVAIDS final Agency action via ALP approval will only be completed with the ALP study if the ALP study provides sufficient information with the ALP package and the NAVAIDS are planned for installation within two years of the ALP approval date. The intention is not to require subsequent "re-study" at a later date regardless of who will install/own/operate/maintain the NAVAIDS.

(3) Sponsors will be advised that:

(a) ALP approval does not include a detailed evaluation of actual construction, approval for temporary construction equipment which may be used during actual construction

DEC 31 1992

GL 1000.4A

or the construction safety/phasing plan for projects (unless specifically approved in the ALP approval letter).

(b) Prior to constructing any development on the airport, Notice (FAA 7460-1) consistent with 14CFR77 must be filed with airports, (ADO's) unless that development is specifically approved in the ALP approval letter.

NOTE: If NAVAID's are not installed immediately, the NAVAIDS will have to be restudied for any construction, requiring notice, on the airport during the interim.

(c) In all cases, that all construction projects will be locally coordinated with the ATCT no less than (10) calendar days prior to beginning the work (or entering on site by the contractor--whichever is earlier). The primary purpose of this local coordination is to "fine-tune" for local airport safety operational purposes the implementation phase of the project. It is not intended to re-examine prior FAA review of prior planning.

(4) The Program Divisions will develop and utilize generally consistent and clear disclaimer language, which will be used by the ADO's to communicate any conditions precedent to the final (or "unconditional") approval of the ALP (which necessarily represents the Agency's only and final understanding with the airport owner). For example, if the proposed new development may require relocation of the Air Traffic Control Tower, affect any NAVAIDS, or require further study regarding frequencies, the Program Division should so state in its comments.

b. Specific Organization Review Responsibilities. The ADO's will provide, as part of the package, its initial opinion regarding any design standards modifications; and will in most cases resolve any modifications of Airports standards they cannot support prior to submittal to the Program Division(s). Each Division will provide its comments directly to the ADO (who will resolve any differences prior to communicating one consolidated FAA position to the Sponsor). Review responsibilities for all program divisions are generally covered under FAA Order 7400.2 (current edition), part 3 and as supplemented by the following statements:

(1) Airports District Offices.

(a) Responsible for carrying out the Region's airport planning program and for assuring that Federal airport improvement project development, as well as non-Federal on-airport development, is compatible with the AMP and ALP.

(b) Responsible for coordinating ALP/AMP's with program divisions (concurrent packages will be sent to AGL-220, AGL-420 and AGL 530 to expedite processing); the ADO will include a copy of its review, analysis and recommendation with the coordination package. Items on the ALP that are to receive a

DEC 31 1992

GL 1000.4A

complete review, for which no further study will be required, will be identified in the ADO's transmittal letters [see Paragraph 12.c.].

(c) Will require the Sponsor to list the major changes which are included in the revised ALP as well as any proposed modifications of design standards (inclusive of the Sponsor's justification).

(d) Will resolve any concerns or non-concurrence actions with the appropriate division and present a final Agency package/design to the airport owner. The ADO has the sole responsibility and authority to represent the Agency's position to the Sponsor.

(e) The ADO review will include Airport Design Standards (i.e., Advisory Circular 150 series) and duplicate review of these standards by other divisions is not necessary.

(2) Airports Division, Safety and Standards Branch is responsible for reviewing the plans, if submitted by the ADO, for compliance with FAR Part 139. This review will be limited to Aircraft Rescue and Firefighting Facilities and will not involve a review regarding airport standards, which will be conducted by the ADO.

(3) Air Traffic Division is responsible for airspace clearance and for reviewing master plans and layout plans to determine what effect proposals will have on air traffic control procedures and facilities.

Note: In addition to "Line-of-Sight" studies conducted by AGL-420, the Air Traffic Division will provide direct advice to the ADO if any new proposed development on the ALP, e.g. new runways, will present a depth perception, distance, or any other problems from an Air Traffic Control (ATC) standpoint which might constrain full use of the proposed development.

(4) Flight Standards Division is responsible for determining if flight operations can be conducted safely and in accordance with APPLICABLE criteria and standards. This includes determining feasibility of instrument approach procedures. Flight Standards will provide a copy of their comments, as needed, to the Air Traffic and Airway Facilities Divisions for informational purposes.

Note: It is understood that the Flight Standards Division determines whether or not an airport or runway qualifies for F&E funding support for NAVAID installations pursuant to APS-1.

DEC 31 1992

GL 1000.4A

(5) Airway Facilities Division is responsible for:

(a) determining the effects of proposed and future development upon existing and proposed air traffic control and navigation facilities, confirming the location of all existing and planned FAA facilities, and coordinating proposed changes directly with the appropriate ADO;

(b) highlighting any known or anticipated frequency management problems and for reserving any required frequencies;

(c) preparation of shadow studies (commonly referred to as "line-of-sight" studies which examine airport development which may conflict with the line-of-sight to airport operational surfaces to an air traffic control tower) and/or the validation from an FAA standpoint of shadow studies prepared by others.

(6) Civil Aviation Security Division is responsible for assuring that all development is compatible with security requirements and the protection of navigational aids and facilities is adequate to deny access to intruders and other unauthorized personnel.

(7) All divisions should:

(a) coordinate with its field facilities, as required. The ADO's will not provide formal coordination with, nor accept comments from, field elements absent specific authority from the applicable Great Lakes Region Program Division.

(b) accomplish their reviews and should complete coordination so that a response can be submitted to the ADO, normally WITHIN 30 calendar days. If the case involves frequency assignments, the response to the ADO will normally be submitted by AGL-420 within 60 days, and if the case is also formally circulated, the response to the ADO will normally be submitted within 90 days.

(8) The ADO will:

(a) specifically advise AGL-530, in its initial cover transmittal, when special circularization is not required (and provide support for this determination); if this advice is not received, then circularization should be accomplished, if appropriate.

(b) advise AGL-420 if the submittal involves any new runway or situation which may require an ILS frequency reservation. If this advice is not received, then frequency reservation is not involved.

DEC 31 1992

GL 1000.4A

(9) The Air Traffic, Flight Standards, and Airway Facilities Division will consider FAA "accepted" Master Plans and FAA "approved" Airport Layout Plans in the preparation of requirements and submittal of the annual F&E budget. The ADO's (through the facilitation of AGL-610) will provide advice and assistance input to the F&E budget regarding known planning or development which may not be reflected in the "accepted" Master Plan or "approved" Airport Layout Plan.

c. ALP Proposal Package. The Airports District Office will:

(1) submit separate copies of preliminary ALP/AMP to the Air Traffic, Flight Standards, and Airway Facilities Divisions for review and comment prior to final approval;

(2) include its review, comment, analysis, and identification of major changes with the request for coordination;

(3) provide AGL-700/420/530/220 and appropriate AFS/ATCT/FSDO/CASFO a copy (for informational purposes) of the final Agency decision and/or review comments forwarded to the Sponsor.

(4) on AIP projects that include NAVAID relocations and/or VADI or REIL installations, furnish two copies to Airway Facilities Division, AGL-400 (Marked for: AGL-420 and AGL-420 attention AGL-422) of the ALP/AMP airspace package. The ADO will indicate in the transmittal that the proposal includes NAVAIDS and request the non-Federal coordinator to initiate an NR study for the NAVAIDS. In addition to the standard submittal the following should be included in the airspace package:

(a) ADO comments on the proposal;

(b) A 7460-1 form for each NAVAID with coordinates to the nearest hundredth of an arc second (.01 arc seconds);

(c) Set of drawings including foundations, grounding and bonding, equipment shelter, site location, equipment installations and antenna drawings as appropriate for each NAVAID;

(d) A completed NF-4 data form for each NAVAID (available from AGL-422). AGL-420 will insure, for AGL-400 as the Division OPI, that comments on both packages are provided to the ADO.

(5) Frequency assignments will be protected by AGL-480 on a one-year basis with the limitation extended on an annual basis upon request to do so from the proponents. The determination issued will include this limitation.

DEC 31 1992

d. ALP Coordination

(1) First-time ALP approvals and major ALP updates require coordination for the following types of airports:

(a) All primary commercial service and commercial service airports;

(b) Airports which presently have, or are candidates for, an Airport Traffic Control Tower, including non-Federal towers;

(c) Any airport with existing or proposed instrument approach procedures (Contact AGL-220 for information on existing procedures if needed);

(d) Reliever airports;

(e) Public use airports requiring airspace action.

(2) Any ALP revision which will result in release of land where there is anticipated construction which may interfere with NAVAIDS, or construction on an airport that has existing FAA or National Weather Service (NWS) facilities, or shows future facilities that have not been previously coordinated by other means, MUST BE COORDINATED direct with AGL-420 for an impact determination on FAA facilities and to assure proper coordination/notification has been followed for non-FAA facilities (i.e. National Weather Service). This must be done regardless of how insignificant the change may appear to be. The line-of-sight/reflection analysis/electro-magnetic interference review limitations outlined in 12.a.(1) must also be considered.

(3) One copy of the ALP package for airspace coordination and review will be sent to the appropriate Air Traffic Control Tower (ATCT) by the ADO's for information only. ATCT's may respond if desired directly to AGL-530 (who will incorporate any appropriate ATCT comments within a consolidated AGL-500 response. In no case shall the ATCT provide comment on the proposal other than through AGL-530.

Note: This paragraph is not intended to preclude conventional local communication channels between the ATCT and the ADO. It is, however, intended to reserve for the purpose of final Agency position communication to the process outlined in this order.

(4) Previously Approved ALP.

(a) coordination is not required for revisions which result from other coordination procedures, or those revisions which the ADO determines to be in conformance with the previously

DEC 31 1992

GL 1000.4A

approved ALP, or which obviously do not involve questions of safety, efficient use of airspace or impacts on FAA facilities and equipment.

(b) In the case of NAVAIDS that have final Agency action via ALP approval any construction on the airport not specifically approved, in the ALP will be coordinated by the appropriate OPI.

(c) Insofar as possible, insignificant changes will be approved by the ADO without requiring an updated ALP.

(d) The ADO will maintain a record of the approved revisions by making pen and ink changes to the file copy of the approved ALP and updating the ALP approval letter. The ONLY Airport's Division "RECORD COPY-OFFICIAL Agency COPY" of any ALP will be maintained in the ADO.

(5) AGL-400 is responsible for any necessary coordination of F&E projects, at the conceptual, program, planning, design or implementation phase and they shall be coordinated by AGL-420 with the appropriate ADO. The ADO has the responsibility and authority to provide input and comment to the F&E Budget as requested by Order GL 2500.10. This input and comment will be through Airports Division, (AGL-610).

(6) Construction equipment and safety/phasing plans

(a) Construction equipment and the related safety/phasing plans for development, unilaterally determined to be in conformance with the approved ALP, should be coordinated for airspace approval by the appropriate OPI, in accordance with Chapter 4, unless:

1 they do not involve questions of security, safety, efficient use of airspace, or

2 impacts on FAA facilities and equipment as determined by Airports (ADO's).

(b) On Class (X) airports, all construction safety/phasing plans must be coordinated with the Federal Security Manager for that airport.

(c) In all cases, the Sponsor will be advised by the OPI that all construction projects will be coordinated locally with the appropriate ATCT no less than 10 calendar days prior to beginning the work (or entering on-site by the contractor-whichever is earlier).

e. Major FAA F&E projects (Air Traffic Control Tower [ATCT], Airport Surveillance Radar [ASR], Instrument Landing System [ILS], etc.) identified for implementation, but not included in or

DEC 31 1992

consistent with an approved ALP or AMP, should be coordinated by AGL-420, using the same coordinating procedures as outlined above and in accordance with Figure 2.

(1) Airway Facilities Division (AGL-420 for NON-FED or AGL-450 for F&E) has overall program and coordination responsibilities in establishing a site for those NAVAIDS and related facilities. AGL-420 or AGL-450 should obtain the proponent/Sponsor approval for the proposal site(s) prior to submitting the ALP depicting the NAVAIDS and related facilities to the ADO for Airspace action. Communications with the proponent/Sponsor should be accomplished through the ADO when the project involves Federal "airports" investment funds.

(2) Other NAVAIDS and related NAVAID facilities will be coordinated by the implementing office directly with the ADO (on agreement airports) or through AGL-530 (off airport or on non-agreement airports). This coordination should be accomplished in accordance with paragraph 44. Any F&E reprogram actions, unless determined both substantive in the judgement of AGL-420 to the NAS and involving a Sponsor, i.e. on an agreement airport, will NOT require coordination or concurrence with any Airports Division element.

f. Terminal Area Forecasts (TAF). Regional comment on the TAF will be accomplished by the Airports Division. APO-100 normally requests regional review of the draft terminal area forecast (TAF) in October.

(1) Generally, based on known indications of interest, Airports Division will normally not coordinate the draft TAF with other divisions, however:

(a) It is recommended that the TAF be furnished to the AGL-220 for verification of the TAF data.

(b) The Great Lakes Region position is that the TAF is updated annually and significant differences can be resolved on a case-by-case basis as the need arises and local forecasts become available.

(c) All comments received through the coordination process are transmitted to APO-100 by the Airports Division. The Great Lakes Region does not have resources available to enter data into the TAF computer data base.

(2) If a forecast resulting from a local planning effort differs significantly from the current TAF (i.e., a difference which would result in a different service level or design type) or funding major development that would otherwise not be eligible and the ADO concurs in the validity of the local forecast:

DEC 31 1992

PPM 5050.5C
Appendix 3

GL 1000.4A

(a) The ADO will transmit the documentation and recommendation to APO-100 through AGL-610 for comments and/or inclusion in the TAF.

(b) The ADO should specify a response due date (not less than 30 days) and if no response is received by the due date, the ADO should consider the local forecast acceptable per recommendation.

(3) Information copies of the National or TAF, as may be required by any Great Lakes Regional Office, may be obtained direct from APO-100.

DEC 31 1992

PPM 5050.5C
Appendix 4

GL 1000.4A

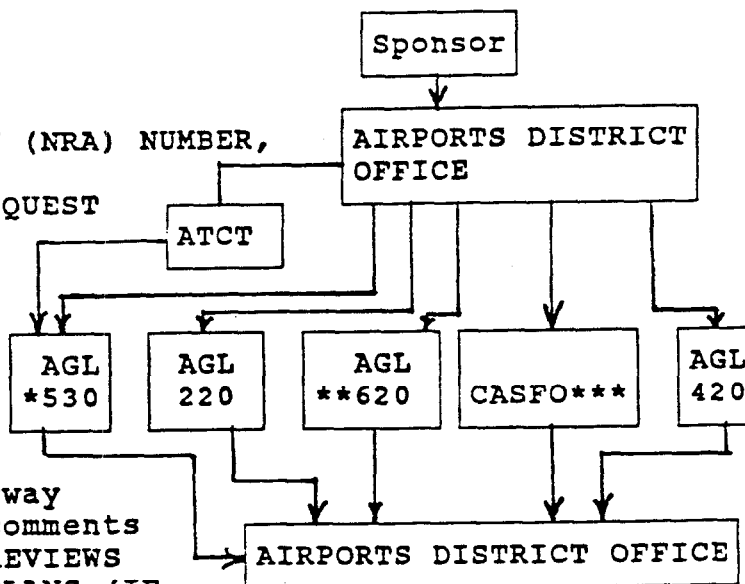
FIGURE 2. AIRPORT LAYOUT AND MASTER PLANS FLOW CHART

SUBMITS PLAN

ASSIGNS NONRULE MAKING ACTION (NRA) NUMBER,
PLAN REVIEW BY ADO; ANALYSIS
TRANSMITTED W/COORDINATION REQUEST
ASSIGN NRA NUMBER

REVIEW FOR SIGNIFICANT
IMPACTS/AIRSPACE ACTION

Resolution of Air Traffic/Airway
Facilities/Flight Standards comments
APPROVAL AND/OR ACCEPTANCE. REVIEWS
CONSTRUCTION SAFETY/PHASING PLANS (IF
SUBMITTED) TO INSURE PROPONENTS HAVE A
SATISFACTORY PROCEDURE FOR PROVIDING
SPACE FOR THE USE OF TEMPORARY
CONSTRUCTION EQUIPMENT



DISTRIBUTION (by the ADO 2)

APPROVED ALP

ACCEPTED AMP

TRANSMITTAL LETTER
TO SPONSOR

AGL-220 (1 cc)

AGL-420 (1 cc)

AGL-220 (1 cc)

AGL-420 (2 cc)

APP-400****(1 cc)

AGL-420 (1 cc)

AGL-530 (1 cc)

State (1 cc)

AGL-530 (1 cc)

APP-400****(1 cc)

AGL-700 (1 cc)

Sponsor (1 cc)

Sponsor (1 cc)

State (1 cc)

AFS/ATCT/PSDO
& CASFO (1 cc
ea.)

DEC 31 1992

GL 1000.4A

FIGURE 2. AIRPORT LAYOUT AND MASTER PLANS CONTINUED

- * When ADO specifically advises AGL-530, no circularization of an ALP is required.
- ** Coordinate only those plans involving siting Airport Rescue and Firefighting (ARFF) buildings/access roads.
- *** Coordinate only when security fencing, or facilities planning decisions are necessary. Coordinate safety/phasing plans for all construction on Class "X" airports with the Federal Security Manager for that airport.
- **** Distribution to APP-400 limited to AMP reports and ALP's for large and medium hub airports per Program Guidance Letter-87-2, 4-23-87. Great Lakes Region Locations are:

Large Hubs - ORD, DTW, MSP
Medium Hubs - CLE, MDW, IND, DAY, MKE, CMH

1) RESERVED

2) Sponsor will be provided letter of "acceptance" regarding the master plan document via the "ALP approval" letter. It is not necessary to send a copy of the "accepted" master plan back to the Sponsor; the transmittal letter approving the ALP is considered sufficient.

APR 19 1993



U.S. Department
of Transportation
**Federal Aviation
Administration**

Great Lakes Region
Illinois, Indiana, Michigan,
Minnesota, North Dakota,
Ohio, South Dakota,
Wisconsin

PPM 5050.5C
Appendix 6

2300 East Devon Avenue
Des Plaines, Illinois 60018

Appendix 6. Airport Layout Plan Checklist

NARRATIVE REPORT: (OPTIONAL)

<u>Reference</u>	<u>YES</u>	<u>NO</u>	<u>Remark</u>
(1) Basic aeronautical forecasts.			
Total Annual operations.	_____	_____	_____
Annual itinerant operations (all aircraft).	_____	_____	_____
Based aircraft.	_____	_____	_____
Annual instrument approaches.	_____	_____	_____
Annual itinerant operations (design aircraft).	_____	_____	_____
Annual itinerant operations by future design aircraft.	_____	_____	_____
 (2) Basis for proposed items of development.			
(3) Rationale for unusual design features and/or modification to FAA Airport Design Standards requested and/or approved. This item must be either in the narrative report or clearly explained on the ALP.			
(4) Development summary for stages of construction.			
Summarized major development for:			
0-5 years	_____	_____	_____
6-10 years	_____	_____	_____
11-20 years	_____	_____	_____
with sketches.			
(5) Shadow study for towered airports.	_____	_____	_____

APR 19 1993

Notes (For Information and Clarification):

1. The airport layout plan sheet data should be in block form indicating total annual operations current/forecast, critical aircraft current/forecast - including the year.
2. The narrative should include any Air Traffic Control Tower line-of-sight problems anticipated by proposed development. A negative statement is required.

TITLE SHEET

There is no FAA national requirement or recommendation regarding this sheet. This FAA Great Lakes Region recommendation is based primarily on the regional experience of what appears to work best for the states, airport owners and consultants. The following Title Sheet commentary is advisory only; and several state organizations contributed to the text.

Notes (For Information and Clarification):

Consider that the runway schematic is in the middle of page at a scale that makes it fit in an area about 8" by 8" on a 24" x 36" sheet (scale usually 1"=1000'). The scale of the Airport Layout Plan Cover Sheet is determined by whatever scale is necessary to fit the runway schematic in approximately an 8" x 8" area. The scale of the Title Sheet should be developed to include the following:

1. Title and revision blocks;
2. Date of ALP, consultant block;
3. Index of sheets;
4. Wind Rose (all weather and IFR) with appropriate airport reference code crosswind coverage plus source of wind information and period covered. (for IFR runways applicable CAT I, CAT II, and CAT III wind rose data should be included);
5. Airport owner, State (if applicable);

APR 19 1993

Change 1
PPM 5050.5C
Appendix 6

6. State outline with county boundaries. County in which airport is located should be blackened in;
7. Location map (general area);
8. Vicinity map (general area showing specific airport location);
9. Airport data table - (Optional on Title Sheet);
 - Mean maximum temperature of hottest month.
 - Airport elevation. (Highest point of the landing areas)
 - Airport Navigational Aids. (NDB, TVOR, ASR, Rotating Beacon, etc.)
 - Airport Reference Point Coordinates (ultimate configuration).
 - Miscellaneous Facilities: taxiway lighting, lighted wind cone, ceilometer, etc.
 - Aircraft Approach Category: (ie. A, B, C, D, or E).
NOTE: The aircraft approach category indicated on the airport data table will be the same as the aircraft approach category published in the U.S. Terminal Instrument Approach Procedures.
 - Airplane Design Group: (ie. I, II, III, IV, V, or VI).
 - Critical aircraft utilized for planning purposes.
10. Space for the FAA approval letter.

APR 19 1993

AIRPORT LAYOUT PLAN

	<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
(1) Layout of existing and proposed facilities and features.			
True and magnetic North with year of and magnetic declination.	_____	_____	_____
Airport Reference Point (ultimate) with lat. and long. to nearest second.	_____	_____	_____
Contours (showing <u>only</u> significant terrain differences)	_____	_____	_____
Elevations:			
Runway - existing and ultimate ends	_____	_____	_____
Touchdown Zone Elevation	_____	_____	_____
Structures (showing only major structures; same extent as terrain differences)	_____	_____	_____
Building Restriction Lines (both sides of runway extended to property line)	_____	_____	_____
Visibility Zones	_____	_____	_____
Runway Details:			
Dimensions - length and width (existing and ultimate).	_____	_____	_____
Orientation - true bearing to nearest 0.01 degree.	_____	_____	_____
Lighting - existing and ultimate threshold lights	_____	_____	_____
Marking - relocated and displaced thresholds	_____	_____	_____
Safety areas - existing	_____	_____	_____
End Coordinates - existing and ultimate to nearest 0.01 second. (use NAD 83 data)	_____	_____	_____
Clearways and Stopways.	_____	_____	_____
Taxiway Details:			
Dimensions (existing and ultimate)			
Widths	_____	_____	_____
Separations from:			
Runway centerline	_____	_____	_____
Parallel taxiway	_____	_____	_____
Aircraft parking	_____	_____	_____
Objects	_____	_____	_____

AIRPORT LAYOUT PLAN (cont.)

	<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
Runway Protection Zone Details:			
Location (200' from pavement/relocated end or at turf runway end).	_____	_____	_____
Size - note or dimension.	_____	_____	_____
Show existing and ultimate.	_____	_____	_____
Type of land interest (fee or easement).	_____	_____	_____
Obstacle Free Area.	_____	_____	_____
Approach details - extend approach area to margin of paper and note FAR Part 77 slope ratio.	_____	_____	_____
(2) Wind rose and coverage analysis.			
Data source cited	_____	_____	_____
Time period cited	_____	_____	_____
Coverage-individual and combined for:			
Airport Reference Code _____ Wind _____ Knots	_____	_____	_____
Airport Reference Code _____ Wind _____ Knots	_____	_____	_____
(3) Basic airport and runway data tables. (existing and ultimate)			
Declared Distances (see attachment - next page.)	_____	_____	_____
Airport elevation (highest point of the usable landing area), to the nearest 0.1'.	_____	_____	_____
Airport Reference Point coordinates.	_____	_____	_____
Airport magnetic variation.	_____	_____	_____
Mean maximum daily temp. for the hottest month.	_____	_____	_____
Airport and terminal navaids (include minimums).	_____	_____	_____
Runway identification.	_____	_____	_____
Percent effective runway gradient.	_____	_____	_____
Percent wind coverage of runway. (Refer to Wind Rose Analysis.)	_____	_____	_____
Designated instrument runway.	_____	_____	_____

APR 19 1993

DECLARED DISTANCES

Runway ____:

TORA _____
TODA _____ (Clearway Dimensions: Length _____ Width _____, if applicable)
ASDA _____ (Stopway Dimensions: Length _____ Width _____, if applicable)
LDA _____

Runway ____:

TORA _____
TODA _____ (Clearway Dimensions: Length _____ Width _____, if applicable)
ASDA _____ (Stopway Dimensions: Length _____ Width _____, if applicable)
LDA _____

Runway ____:

TORA _____
TODA _____ (Clearway Dimensions: Length _____ Width _____, if applicable)
ASDA _____ (Stopway Dimensions: Length _____ Width _____, if applicable)
LDA _____

Runway ____:

TORA _____
TODA _____ (Clearway Dimensions: Length _____ Width _____, if applicable)
ASDA _____ (Stopway Dimensions: Length _____ Width _____, if applicable)
LDA _____

These distances, including any clearway or stopway are declared in accordance with the definitions, standards, recommendations, and applications presented in Advisory Circular 150/5300-13, Airport Design. In accordance with FAR Part 1, airport operators incur certain responsibilities when they declare a clearway or stopway.

APR 19 1993

Change 1
PPM 5050.5C
Appendix 6

AIRPORT LAYOUT PLAN (cont.)

		<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
	Pavement type.	_____	_____	_____
	Pavement strength (include note of typical aircraft this will accommodate).	_____	_____	_____
	Approach surfaces for each end.	_____	_____	_____
	Runway marking.	_____	_____	_____
	Runway lighting - (MIRL, etc.).	_____	_____	_____
	Nav aids.	_____	_____	_____
	Taxiway lighting and marking.	_____	_____	_____
	Design Group and category.	_____	_____	_____
(4)	Legend and building tables.	_____	_____	_____
(5)	Title and revision blocks.	_____	_____	_____
(6)	Airport owner approval block.	_____	_____	_____
(7)	List of approved modifications to FAA Airport Design Standards.	_____	_____	_____
(8)	Any possible Air Traffic Control Tower line-of-sight problems anticipated by proposed development. (If yes, include a separate sheet showing the shadowed areas.)	_____	_____	_____
(9)	General Aviation development.	_____	_____	_____

Notes (For Information and Clarification):

1. Show prominent airport facilities (existing and proposed) including runways, taxiways, aprons, blast pads, buildings, nav aids, parking area, roads, lighting, runway numbers, fences (general), fueling facilities (general), and control tower (elev. noted).
2. Show prominent topographic features including streams, ponds, significant drainage and contours, railroads, roads, power lines, towers.

APR 19 1993

3. Plan Sheet Organization:

- A. Recommended sheet size is 24' x 36".
 - B. Recommended minimum lettering size: 0.120"
 - C. The drawing should depict a north arrow, legend, scale, and a title and revision block. The scale should be shown graphically and may also be shown numerically. (This recommendation generally applies to all ALP sheets.)
 - D. Reserved.
 - E. Minimize use of shading.
 - F. Avoid "shadow" lettering.
 - G. Reserved.
 - H. All layouts should be oriented with north to the top or left of the sheet (preferred).
 - I. The number of drawings and detail of the Airport Layout Plan set should be determined prior to execution of a planning services agreement, with consultation with FAA, State organization (if applicable), and the Airport Sponsor.
4. Legend should include pertinent features of the plan. Existing features should be shown with solid lines, future items should be shown with dashed lines.
5. Show existing and future runway protection zones w/dimensions.
6. Design approach surfaces and actual clear for approach slopes shown for all approaches. Clear for approach slopes checked against FAA Form 5010-1 and USGS obstruction chart where available. The actual clear for approach slope may be omitted if shown on approach sheet (shown in runway data table also).
7. Reserved.
8. Reserved.

APR 19 1993

Change 1
PPM 5050.5C
Appendix 6

9. Existing property line and easements should be shown.
10. True bearings of all runways and/or landing strips should be shown and noted as true. Magnetic declination should be shown at the north arrow.
11. Elevations should be shown for all existing and proposed runway or landing strip ends and intersections.
12. Location of ultimate airport reference point should be shown on plan.
13. Existing and proposed buildings and building areas and whether siding is metallic or non-metallic should be shown. Roof elevations for existing and proposed buildings shown on layout sheet or other sheets are desirable.
14. Reserved.
15. Displaced thresholds are shown as displaced in accordance with FAA AC 150/5300-13, Appendix 2 with latest changes.
16. Major general airport drainage direction and structures should be indicated.
17. Ground contours shown if unusual conditions exist (only if clarity is not lost).
18. Facilities that are to be phased out, if any, are described. Any conversion of runways to taxiways, etc., should be noted.
19. All objects affecting visibility zone between landing strips and/or runways, safety areas, object free areas, object free zones, and FAR Part 77 surfaces should be shown and disposition described (if not depicted on other plan sheets).
20. Actual runway safety areas should be shown for all existing runways. For planned runways, the current runway safety area criteria should be shown.
21. Reserved.

APR 19 1993

22. Show existing object free areas.
23. Areas reserved for future aviation development and services are outlined such as general aviation, fixed base operations, heliports, cargo facilities, etc.

AIRPORT AIRSPACE AND APPROACH PLAN AND PROFILE (PROFILE VIEW OPTIONAL)

	<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
(1) Plan view of all Part 77 surfaces (normally based on <u>ultimate</u> runway length.)			
Scale (1" = 2000')			
USGS 7 1/2 min. Quad is base map.			
Runway end numbers shown.			
50' elevation contours shown on sloping surfaces.			
Objects are identified and top elevation noted of any penetrations.			
Entire PIR surface is shown (on separate page if needed).			
(2) Small scale profile views of <u>existing</u> and <u>ultimate</u> approaches. (OPTIONAL)			
Scale (1" = 1000' horizontal, 1" = 100' vertical).			
Ground profile along runway centerline.			
Significant objects in approach regardless of whether they are obstructions or not - with top elevations.			
Existing and ultimate runway ends and Part 77 surfaces.			
(3) Obstruction Data Tables, as appropriate (see RPZ Drawing discussion).			

APR 19 1993

Change 1
PPM 5050.5C
Appendix 6

RUNWAY PROTECTION ZONE (RPZ) PLAN (OPTIONAL, BUT HIGHLY DESIREABLE)

	<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
(1) Large scale <u>plan views</u> of inner portions of approaches, <u>usually</u> limited to the RPZ areas.			
Scale (1" = 200' horizontal, 1" = 20' vertical).	_____	_____	_____
Use aerial photos (optional) for base map.	_____	_____	_____
Use numbering system of identification.	_____	_____	_____
Show property line. OFA, RSA, & land uses.	_____	_____	_____
Roads & Railroads:			
Elevations and vertical clearances			
(at RPZ edge intersections and extended			
Runway Centerline).	_____	_____	_____
Runway end with number.	_____	_____	_____
Contours (major terrain features only).	_____	_____	_____
(2) Projected <u>profile views</u> of Item 1 above.			
Terrain along extended runway centerline.	_____	_____	_____
Significant objects (fences, stream beds, roads, etc.)	_____	_____	_____
Obstructions - use numbers from plan view.	_____	_____	_____
Cross-section of roads and railroads with dashed lines for RPZ edge intersections.	_____	_____	_____
(3) Obstruction Tables.			
Separate table for each RPZ, with columns for:			
Obstruction ident. number and description.	_____	_____	_____
Amount of penetration.	_____	_____	_____
Proposed disposition of the obstructions.	_____	_____	_____
(4) Interim stage RPZs when plans for interim runway extensions are firm and construction is reasonably assured in the near future.	_____	_____	_____

Notes (For Information and Clarification):

Plan and profile view of existing and future approach areas should be provided for existing runways on this sheet.

APR 19 1993

PLAN VIEW

1. Runway number indicated on the runway, and runway end elevations and stations, existing and future, should be shown. Runway elevations and stations of any displaced threshold, existing or future, should be shown.
2. Scale will depend on size of runway protection zone. Usually a scale of 1" = 100' or 1" = 200' will be best. Prominent north arrow displayed. A separate sheet for each approach may be needed.
3. Man-made and natural objects laterally from the runway centerline should be shown if they penetrate the 7:1 transition surface. This applies for the entire runway length and can include trees, poles, antenna, hangars, buildings, rotating beacon, etc.
4. Man-made and natural objects should also be shown in the approach area, if they penetrate standard surfaces.
5. All roads and railroads shown. Ground elevations shown where the extended runway centerline and sides of the existing and future approach surfaces intersect the road or railroad.
6. All approach surfaces, existing and future, should be shown, labelled, and runway protection zones dimensioned.
7. Runway safety areas, OFZ, OFA, existing and future, should be shown, labelled, and dimensioned.
8. Controlling objects and or obstructions indicated. Each obstruction should be numbered to coincide with the "Schedule of Obstructions" and the profile view, and elevations shown to the extent possible without cluttering the drawing. Example: RWY 13, obstruction No. 1 Id. No. 13-1.
9. Show Object Free Area.
10. Reserved.

APR 19 1993

Change 1
PPM 5050.5C
Appendix 6

11. Navigational Aids and miscellaneous lighting aids may be shown (VASI's, REIL's, MALS, etc.). Care should be exercised so as to not clutter the drawing.

PROFILE VIEW

1. Profile view directly below plan view -- stationing coincides vertically. Stationing agrees with the airport layout plan.
2. Preferred vertical scale -- 1" = 10' or 1" = 20'.
3. Existing runway centerline ground profile shown to limits of the plan view. Runway ends and displaced thresholds stations and elevations should be shown.
4. All roads and railroads should be shown.
5. Existing and ultimate approach surfaces and all objects penetrating these imaginary surfaces or the transition surfaces shall be shown. If the threshold has been displaced in accordance with FAA AC 150/5300-13, Appendix 2, or previous FAA Orders or Advisory Circulars, the "threshold location plane" is shown.
6. Objects which penetrate the 7:1 transition slope or come within five feet below it should be shown. The point where the existing (future 7:1 surface if different) passes through the object should be shown with symbol and defined in legend.
7. Reserved.
8. Depict as closely as possible the object being shown, i.e. show a house shape for a house, a tree shape for a tree, etc.
9. The highest point of a structure is shown.
10. Reserved.

APR 19 1993

11. If there are so many objects which need to be shown that the profile view becomes cluttered and unreadable, then only vertical lines are shown to the correct height with an identifying number.
12. Legend included if needed to keep the plan from becoming cluttered.
13. Each obstruction numbered in the profile view as was done in the plan view to coincide with the Schedule of Obstructions.
14. Title block includes airport name, runway approach, plan and profile scale, date, sheet number and consultant. Revision block shown.

SCHEDULE OF OBSTRUCTIONS

1. Every obstruction or group of obstructions (trees) to every imaginary surface, as defined in Subpart C of FAR Part 77, should be listed. This includes the entire primary, transition, and approach surfaces.
2. Every obstruction must also be shown on at least one sheet of the ALP. Objects along the entire length of the runway must be considered.
3. A proposed disposition must be shown for every obstruction. If an FAA aeronautical study is requested for a determination of no hazard or if the FAA has made a determination of no hazard this should be noted.

APR 19 1993

Change 1
PPM 5050.5C
Appendix 6EXAMPLE SCHEDULE OF OBSTRUCTIONSRUNWAY 10/28

SCHEDULE OF OBSTRUCTIONS PENETRATES BY								
EXISTING			FUTURE					
KEY NO.	DESCRIPTION	PRIMARY SURFACE	34:1	7:1	PRIMARY SURFACE	50:1	7:1	FUTURE DISPOSITION
13-1	Building						14'	****
13-2	Power Pole						29.5'	***
13-3	Trees						0-11'	Remove
13-5	Power Pole						11'	***
13-6	Trees						0-19'	Remove
13-7	Power Pole						6'	***
13-8	Power Pole						16'	***
13-9	Power Pole						18'	***
13-10	Trees						21.5'	Remove
13-11	Buildings						0.5'	**
13-12	Trees						11'	Remove
13-13	Power Pole						28'	Remove
13-15	Trees						0-22	Remove
13-16	Trees						0-16	Remove
13-17	Power Pole					27'		Remove
13-18	Tree				9'			Remove
13-19	CTH "TJ"		2'		0-4'			Relocate
13-20	Trees						13'	Remove
13-21	Ground				0-31'	0-29'	0-29'	Remove
13-22	Trees						9'	**
13-23	Trees						28'	Remove
13-24	Trees						11'	Remove
13-25	Trees						38'	Remove
13-26	Trees						38'	Remove
13-27	Tree				31'			Remove
13-28	Tree				11'			Remove
13-29	Building						46'	Remove
13-30	Tree						9'	**
13-31	Silo			8'			60.5'	Remove

* FAA Determination of No Hazard Requested

** Object determined not to be a hazard per FAA letter dated July 16, 1984

*** Marking and lighting of object required per FAA letter dated July 16, 1984

**** Lighting of object required per FAA letter dated July 16, 1984

NOTE: Measure object heights and indicate penetration to the nearest five feet.

APR 19 1993

TERMINAL AREA PLAN (OPTIONAL)

		<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
(1)	Large scale plan view of the area (or areas) where aprons, buildings, hangars, parking lots, etc., are located.			
	Building Data Table:			
	Structure ident. number.	_____	_____	_____
	Top elevations (penetration if any).	_____	_____	_____
	Obstruction marking.	_____	_____	_____
	Planned for removal, abandonment.	_____	_____	_____
(2)	Scale 1" = 100' or 1" = 50' (as determined appropriate by the planner). North arrow.	_____	_____	_____
(3)	Fueling facilities, existing and future at airports with runways greater than 5,000' (and less where dictated by turbo-prop traffic). Jet fuel facilities should be separated from 80/87 and 100/130 fuel facilities.	_____	_____	_____
(4)	Air carrier gate positions shown. Indicated by circles. Existing and future positions designated.	_____	_____	_____
(5)	Existing and future security fencing with gates shown.	_____	_____	_____
(6)	Existing and future buildings indicated with critical elevations of highest buildings and buildings closest to the runway.	_____	_____	_____
(7)	Building Restriction Line (BRL).	_____	_____	_____
(8)	Taxiway or taxilane centerlines designated.	_____	_____	_____
(9)	Aprons, taxiways, clearances, etc. dimensioned.	_____	_____	_____
(10)	Location, ties, and elevations of any bench marks or monuments in terminal area.	_____	_____	_____
(11)	Auto parking existing and future shown.	_____	_____	_____
(12)	General drainage.	_____	_____	_____

APR 19 1993

Change 1
PPM 5050.5C
Appendix 6

TERMINAL AREA PLAN (cont.)

	<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
(13) Entrance and access roads, existing and future shown.	_____	_____	_____
(14) Various aircraft aprons, existing and future, and their function shown (air carrier, cargo, transient, tie down area, etc.).	_____	_____	_____
(15) Index of buildings and facilities where necessary.	_____	_____	_____

LAND USE PLAN (OPTIONAL)

	<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
(1) Depict existing and recommended use of all land within the ultimate property line and in the vicinity of the airport (off airport to at least the 65 LDN optional).	_____	_____	_____
(2) Legend depicting symbols used to show general uses (ag., rec., industrial, commercial, res., aero., etc.).	_____	_____	_____
(3) Public Facilities in the area (schools, hospitals, parks, etc.).	_____	_____	_____

AIRPORT PROPERTY MAP/LAND INVENTORY MAP (OPTIONAL)

	<u>YES</u>	<u>NO</u>	<u>Remark</u> <u>Reference</u>
(1) Fee land interests. (existing and ultimate)	_____	_____	_____
(2) Easement interests. (existing and ultimate)	_____	_____	_____
(3) Legend showing the shading or cross hatching used to delineate different acquisitions.	_____	_____	_____
(4) Data table.			
Date property was acquired.	_____	_____	_____
RPZ shown (existing and ultimate)	_____	_____	_____
Major features (existing and ultimate - runways, taxiways, aprons, etc.).	_____	_____	_____

APR 19 1993

Notes (For Information and Clarification):

1. Recommended Scale 1" = 200' to 1" = 600'.
2. All existing airport property interests must be shown. Parcels should be shown for land purchased with FAA participation, state and sponsor, sponsor only, and any other acquisition program. Actual grant references regarding property acquired with FAA participation would be helpful.
3. Bearings and distances should be shown (when available) for the airport boundary and easement interest. Bearings shown and noted as true.
4. Intersection of runway centerline extended and property line with stations should be shown.
5. Major infrastructure such as runways and RPZ should be shown.
6. Section corners, section lines and/or government lot lines.
7. Reserved.
8. Land Acquisition Plan Table
Owner
Type of interest owned by airport (Fee, Avigation Easement, Clear Zone Easement)
Acquisition program (FAA participation, PFC, State & Sponsor, Sponsor Only, etc.) including general time frame.
9. Title block, legend, date, consultant, revision block.